

Certified AIS AtoN Type 1



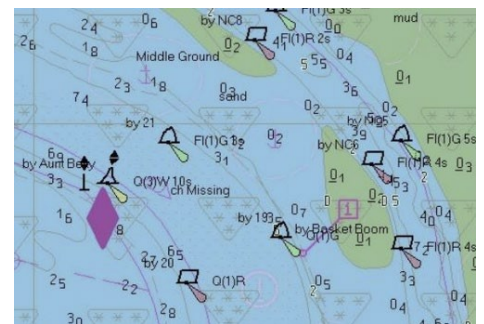
### DAS EXPRESS

## Professional Buoy Position and Lantern Health Monitoring Kit

DAS EXPRESS is a plug and play kit, which can be easily fitted to any buoy to continuously monitor its position and the health and operation of the lantern.

Using certified AIS-AtoN transmissions, real-time Buoy position is continuously transmitted, enabling accurate tracking and alerts if off position. Install and connect our unique retrofit Lantern-Sensor and any lantern malfunction is immediately detected and alerted.

DAS EXPRESS is fully interoperable with all VTS systems and vessel navigation displays, and gives you complete surety and peace of mind that your buoys are on position and their lanterns working. Improves safety, helps avoid potential liabilities and costly physical inspections.



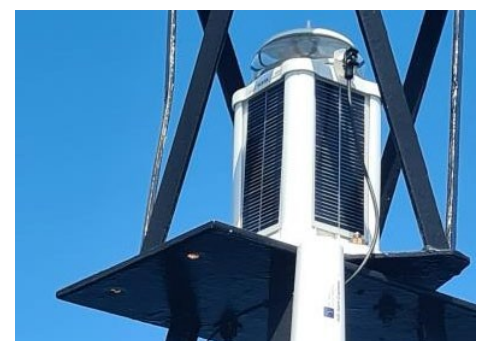
Live tracking of buoy position and automatic off position alert.

AtoN Dashboard

AtoN Status: ●

	North Cardinal	<span style="color: green;">●</span> Light - ON	On Position	11:21:26 13/11
	Thorn Knoll	<span style="color: green;">●</span> Light - ON	On Position	11:27:13 13/11
	South Bramble	<span style="color: red;">●</span> Light - OFF	On Position	11:27:56 13/11

Real-time monitoring of lantern status and alert if any malfunction.



The unique SRT Lantern sensor retrofits to any lantern in minutes, automatically learns, and continuously monitors the lantern's performance.

Continuously monitors lantern operation and detects and transmits alerts in the event of malfunction or non-compliant behaviour.

Waterproof and ruggedized for continuous long term maintenance free operation in any marine environment.

Complete kit that quickly and easily fits to any buoy or marine infrastructure, large or small. No special skills or tools required.

Continuously transmits exact GPS position of buoy, which is electronically visible on your own VTS screen, as well as onboard vessel chart navigation displays.

Flexible power system. Internal rechargeable battery provides 5 days operation without external power source or provides back up if connected to a solar or other power source.

Fully-certified AIS AtoN to international IMO standards. Fully interoperable with all AIS connected systems.

## EXPRESS options



### EXPRESS 1 Hazard Alert

Ideal for temporary electronic marking of any maritime hazards. Battery powered.



### EXPRESS 2 Buoy Location Monitoring

Continuous real time electronic (AIS) marking of buoy location. Battery powered or connects to existing buoy power or solar system.



### EXPRESS 3 Buoy location & lantern status monitoring

Buoy location & lantern status monitoring. Continuous monitoring of buoy location and lantern operation with malfunction and off-position alerts. Battery powered or connects to buoy power or solar system.

Items included in each Express packaged solution indicated by tick

Product code 418-0094

Product code 418-0012

Product code 418-0095

1 x AtoN Transponder		✓	✓	✓
1 x Brackets and fixings		✓	✓	✓
1 x Configuration and charging dock		✓	✓	✓
1 x Lantern interface module and cables <sup>1</sup>			✓	✓
1 x Lantern sensor and fixings kit.				✓

## ACCESSORIES

### 1 DAS Lantern Interface Module (LIM)

Product code 418-0100

LIM enables EXPRESS transponder to be connected to an external power source or the SRT Lantern sensor.

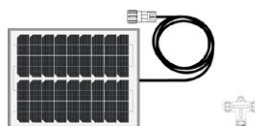


1 x Lantern interface module

### 2 DAS solar pack

Product code 418-0099

DAS Solar Pack is a high quality complete fully marinised 20W solar power package with stainless steel fittings for the DAS Express.



2 x 10W Panels and 1x T-Connector



316 grade marine stainless steel fixings and adjustable brackets

Transceiver	EXPRESS 1	EXPRESS 2	EXPRESS 3
<b>Physical Specification</b>			
Dimensions	375mm x 67mm max. (H x D)		
Weight	350g (AtoN Express unit only)		
Mounting bracket	Supports 25mm to 55mm poles (D)		
<b>VHF Transceiver</b>			
Transmitter	x1		
Frequency	156.025 to 162.025MHz in 25kHz steps		
Radiated Power (EIRP)	1W		
<b>Environmental</b>			
Waterproof	To IP67		
Operating temperature	-15°C to +55°C		
<b>AtoN Express Functions</b>			
Type 1 FATDMA operation	Yes		
Message #21 transmission	Yes		
<b>Standards Compliance</b>			
AIS Certification	IEC62320-2 Edition 1 2008-03; IEC standard, AIS AtoN Stations; ITU-R M.1371-5; Universal AIS Technical Characteristics		
Environmental standard	IEC60945:2002-08		
Product Safety	EN60950-1:2006; +A11:2009; +A1:2010; +A12:2011		
GPS performance standard	IEC61108-1:2003-07		
<b>Electrical Specification</b>			
Power supply	Internal 2100mAh Lithium-Ion battery pack		
Operating time	Up to 5 days operation at 5 minute reporting interval		
Optional	External power supply (12 to 24VDC)		
External power	External supply <0.5Ah / day with 5 minute position reporting interval	/	

## EXPRESS 2 Lantern Interface Module

<b>Physical Specification</b>	
Dimensions	140mm x 100mm x 45mm (L x W x H)
Weight	0.5kg (including supplied cable)
<b>Electrical Specification</b>	
Input voltage range	12V to 24VDC (9.6V to 32V maximum range)
Av. power consumption	<2w (when connected to an AtoN, reporting position every five minutes)

## EXPRESS 3 Solar Panel

<b>Physical Specification</b>	
Dimensions (per panel)	355mm x 252mm x 25mm
Weight (per panel)	1.3kg
<b>Electrical Specification</b>	
Open circuit voltage	21.6V
Max power voltage	16.96V
<b>Installation</b>	
Cable length	2m

Maritec, a SRT dealer, enhances maritime domain awareness by providing tracking technology and system solutions for individual vessel owners, port authorities, maritime infrastructure owners, coast guards and national security agencies around the globe. Applications include the tracking of commercial and leisure vessels; sustainable fishery; anti-collision; search and rescue; waterway management, port and coast security; pollution management and environmental management.

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